The following is a listing of the pending claims:

1. (previously presented) A method comprising:

representing, by an aggregate current usage value, a total amount of a resource that is managed by a software tool and is theoretically currently in use in the aggregate by a first process and a second process;

associating with the first process a first maximum value of the aggregate current usage value;

associating with the second process a second maximum value of the aggregate current usage value;

decreasing the aggregate current usage value over time; and

in response to a request by one of the processes for additional use of the resource, allowing the process to make the requested additional use and increasing the aggregate current usage value by the amount of requested additional use to a new aggregate current usage value, provided that the new aggregate current usage value would not exceed the maximum value associated with that process.

2. (previously presented) The method of claim 1, wherein the resource comprises one of memory space and system processor time.

3. (previously presented) The method of claim 1, wherein the resource is in an embedded computer system.

4. (previously presented) The method of claim 1, wherein the resource is in a real-time networking environment.

5. (previously presented) The method of claim 1, wherein the software tool is modeled as a leaky bucket.

6. (previously presented) The method of claim 1, further comprising:

determining a priority of the resource; and

allocating the resource based on the priority of the resource.

7. (previously presented) The method of claim 1, further comprising adjusting at least one of the first maximum value and the second maximum value .

8. (previously presented) The method of claim 1, further comprising notifying the requesting process that additional use of the resource is allowed when the requested additional use plus the aggregate current usage value would not exceed the maximum value associated with the requesting process.

9. (previously presented) The method of claim 8, wherein notifying the requesting process comprises sending a message to a network address associated with the requesting process.

10. (previously presented) A method comprising:

in a network having resources that are accessed by a first device and a second device, for each resource, creating a software tool on each device that uses the resource to manage usage of the resource by the device; and

for each software tool that is used to manage a particular resource used by a particular device,

using an aggregate current usage value to represent a total amount of the particular resource that is managed by the software tool and is theoretically currently in use in the aggregate by both the first and the second devices,

associating with the first device a first maximum value of the aggregate current usage value,

associating with the second device a second maximum value of the aggregate current usage value,

decreasing the aggregate current usage value over time, and

in response to a request by one of the devices for additional use of one of the resources, allowing the device to make the requested additional use and increasing the aggregate current usage value by the amount of requested additional use to a new aggregate current usage value, provided that the new aggregate current usage value would not exceed the maximum value associated with the requesting device.

11. (previously presented) The method of claim 10, wherein creating the software tool comprises: allocating a descriptor representative of the software tool for each of the plurality of devices accessing the resource managed by the software tool.

12. (previously presented) The method of claim 10, further comprising: decrementing the maximum value of the software tool in response to the use of the resource associated with the software tool by any device.

13. (previously presented) The method of claim 32, further comprising sending a message to a network address associated with a device waiting to use the resource when the available amount of resource exceeds a specified usage level.

14. (previously presented) The method of claim 12, further comprising incrementing the maximum value to be equal to or more than a usage level requested by the device.

15. (previously presented) The method of claim 12, further comprising overriding the maximum value to allow a device access to one of the plurality of resources.

16. (original) The method of claim 10, further comprising destroying the software tool in response to a request from one of the devices.

17. (previously presented) A machine accessible medium, which when accessed results in a machine performing operations comprising:

representing, by an aggregate current usage value, a total amount of a resource that is managed by a software tool and is theoretically currently in use by both a first device and a second device;

associating with the first device a first maximum value of the aggregate current usage value,

associating with the second device a second maximum value of the aggregate current usage value,

decreasing the aggregate current usage value over time; and

in response to a request by one of the devices for additional use of the resource, allowing the device to make the requested additional use and increasing the aggregate current usage value by the amount of requested additional use to a new aggregate current usage value , provided that the new aggregate current usage value would not exceed the maximum value associated with the requesting device.

18. (previously presented) A network including a plurality of devices, comprising:

a plurality of resources running in the network; and

computer software, residing on a computer readable medium at each device accessing the plurality of resources to cause the device to perform the following operations:

representing, by an aggregate current usage value, a total amount of a resource that is managed by a software tool and is used by at least a first device and a second device;

associating with the first device a first maximum value of the aggregate current usage value;

associating with the second device a second maximum value of the aggregate current usage value;

decreasing the aggregate current usage value over time; and

in response to a request by one of the first and second devices for additional use of the resource, allowing the device to make the requested additional use and increasing the aggregate current usage value by the amount of requested additional use to a new aggregate current usage value , provided that the new aggregate current usage value would not exceed the maximum value associated with the requesting device.

19. (previously presented) The network of claim 18, wherein the plurality of resources comprise memory space or system processor time.

20. (previously presented) The network of claim 18, wherein the network comprises an embedded computer system.

21. (previously presented) The network of claim 18, wherein the network operates in a real-time networking environment.

22. (previously presented) The method of claim 1, further comprising calculating an available amount of credit by a difference between the maximum value and the aggregate current usage value.

23. (previously presented) The method of claim 1 wherein decreasing the aggregate current usage value over time comprises decreasing the aggregate current usage value per unit of time by an estimated value of the resource that becomes available per unit of time.

24. (Cancelled).

25. (previously presented) The method of claim 1, further comprising:
determining a priority of a process accessing the resource; and
allocating the resource based on the priority of the process.

26. (previously presented) The method of claim 1 in which decreasing the aggregate current usage value over time comprises decreasing the current usage value by a preset amount per unit of time.

27. (previously presented) The method of claim 26 further comprising regulating use of the resource based on the decreasing of the aggregate current usage value so that the total amount of use of the resource does not exceed the preset amount per unit of time.

28. (previously presented) The method of claim 26 in which the preset amount represents an estimated amount of resource that becomes available per unit of time.

29. (previously presented) The method of claim 1, further comprising, if the requested additional use plus the aggregate current usage value would exceed the maximum value associated with the requesting process, waiting for a period of time until the aggregate current usage value decreases to below a level such that increasing the aggregate current usage value based on the amount of requested additional use would not exceed the maximum value associated with the requesting process .

30. (previously presented) The method of claim 1 in which the decreases of the aggregate current usage value is independent of the amount of use of the resource by the processes.

31. (previously presented) The method of claim 10 in which different software tools on different devices that are associated with a common resource have different specified maximum values .

32. (previously presented) The method of claim 12, further comprising providing a device waiting to use the resource information on the amount of resource that is available based on a difference between the maximum value and the aggregate current usage value.

33. (previously presented) The machine accessible medium of claim 17, wherein the resource comprises one of memory space and system processor time.

34. (previously presented) The machine accessible medium of claim 17, wherein the software tool is modeled as a leaky bucket.

35. (previously presented) The machine accessible medium of claim 17, which when accessed results in the machine performing operations comprising adjusting the associated maximum value .

36-38. (Cancelled)